

Let it go or let it grow? – Personal network development and the mobilization of intra-organizational social capital

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ARTICLE INFO

Keywords:

Personal networks
Network development
Social capital
Network resources
Newcomer socialization
Life course transitions

ABSTRACT

We investigate how differences in personal network development affect the mobilization of social capital for new organizational members. Analyzing three waves of panel data reported by 24 newcomers in nine organizations, we ask whether the kind and volume of resources derived by focal actors depends rather on changes in the composition or in the size of their intra-organizational networks. We find that change in network composition predicts an increase in social capital mobilization over time. Network growth is found to reduce the affective resources that newcomers mobilize. Implications for subsequent research and organizational socialization practices are discussed.

1. Introduction

Personal networks represent the opportunity structures from which focal actors ('egos') can mobilize resources through their interpersonal ties with network contacts ('alters') to catalyze, extend, and complement their own resource repositories (Kwon and Adler, 2014; Nahapiet and Ghoshal, 1998; Riemer, 2005). The added value created through such network resource exchanges is conceptualized and investigated as 'social capital' for individual actors as well as organizations (Gulati et al., 2011; Prusak and Cohen, 2001; Robison et al., 2002). Since both have a vested interest in social capital to be fostered, one of the ongoing efforts in social network analysis and organizational research is to increase our understanding of how the development of personal networks and social capital mutually affect each other (Batistič and Tymon, 2017; Burt, 2005; Maurer and Ebers, 2006; Perry-Smith and Shalley, 2015).

Extant research has found the dynamics involved to be far from obvious (Henttonen et al., 2014; Moore et al., 2018; Perry-Smith and Shalley, 2015). Personal network analysis has advised a longitudinal perspective, so as to better account for the interdependencies between changes in context, resource needs, and network composition (Lane and Sweeny, 2019; Lerner et al., 2014; Lubbers et al., 2010). Social capital theory has cautioned researchers not to presume that the economic principle of more-means-more implied by the conceptual 'capital' metaphor invariably applies to the value derived from network resources (Gargiulo and Benassi, 2000; Leana and Van Buren, 1999; Willem and

Scarbrough, 2006). Both raise interesting questions that warrant further investigation: Will a personal network offer more support if alters remain the same over time (allowing for ties to develop) or if alters change (reflecting changes in ego's own development)? Will a bigger network be the more helpful network, irrespective of the stability or 'churn' in its composition? Driven by these questions, our paper investigates how different forms of personal network development affect the mobilization of social capital by focal actors.

To do so, we study organizational newcomers and the personal networks they develop upon entering a new social context, joining different foci of activity "around which individuals organize their social relations" (Feld, 1981, p. 1016). More specifically, we follow young professionals starting out on their first employments, one of the defining thresholds to cross when entering adulthood (Bidart and Lavenex, 2005; Degenne and Lebeaux, 2005; Hollstein and Wagemann, 2014). Investigating such life course transitions and the accompanying "changes in the contexts of regular social interaction" (Small et al., 2015, p. 91) has proven particularly informative for researchers interested in the processes of personal network development (Bost et al., 2002; Kalmijn, 2012; Lubbers et al., 2010; Wrzus et al., 2013). Since these transitions represent a "near complete fresh start" for ego within an initially unfamiliar environment, there is "a low probability of having previously known alters" (Small et al., 2015, p. 94). This allows us to observe processes of tie formation, indicating the role of both actor agency and context (Dahlander and McFarland, 2013; Lane and Sweeny, 2019).

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Studying newcomers as they “enter a new context, manage the stresses of that change, and slowly find their way to new routines” (Small, 2017, p. 21) further allows us to witness how they mobilize resources from their emerging personal networks. It is the control over, exchange, and combination of such resources that is understood as social capital (Bourdieu, 1983; Coleman, 1990), since it allows actors to attain objectives or reap benefits (Burt, 2005; Lin, 2001). For newcomers, gaining access to intra-organizational resource exchanges is a central aspect of socialization (Fang et al., 2011; Jokisaari and Nurmi, 2012; Walsh et al., 2018) and their transition process from outsider to insider status (Bauer et al., 2007; Korte and Lin, 2013). Mobilizing these resources represents valuable social capital for them, as it supports newcomers with their task-performance, initial career steps, and/or socio-emotional integration (Iseke, 2007; Jokisaari and Nurmi, 2012). Young professionals, in particular, will initially depend on resources shared or provided by insiders to apply and further develop their human capital within the organizational context (Ashforth et al., 1998; Slaughter and Zickar, 2006). Both their personal disposition and organizational context will affect which resources they can potentially access and actually mobilize (Small, 2009). As such, newcomer socialization represents an information-rich scenario to study how personal networks matter, “which network members matter and what kinds of network support matters” (Hollstein and Wagemann, 2014, p. 240).

The aim of our study is to contribute to the growing literature on personal network development around life course transitions, addressing two aspects in particular. First, due to the inherent challenges of collecting longitudinal data on social networks, there is still a scarcity of research that tracks changes in personal networks over time (Bidart and Lavenue, 2005; Lubbers et al., 2010). We add insights from a three-wave panel study tracing the size and composition of intra-organizational networks reported by 24 focal actors over the course of their extended socialization at nine different companies. Second, we expand on the investigation of personal network development by also taking into consideration how it affects social capital mobilization. Rather than equating the (potential) access to certain actors with social capital, we operationalize the reported personal networks as an opportunity structure from which resources can be derived and inquire which were in fact channeled (Small et al., 2015; Smith et al., 2012). In combination, analyzing the change in personal networks and in the social capital mobilization by newcomers enables us to probe for how the two are connected.

The paper is structured accordingly, with Section 2 introducing the adapted theoretical framework of personal network development and formulating two sets of hypotheses regarding the mobilization of resources for newcomers over time. Section 3 describes the empirical setting of our panel and the methods applied for data collection, processing, and analysis. Section 4 presents findings from the descriptive and longitudinal analyses of the data regarding our hypotheses, before Section 5 discusses the results and their implications for further research and organizational socialization practices.

2. Theoretical framework and predictions

Organizational socialization represents one scenario of a freely chosen life course transition (Degenne and Lebeaux, 2005; Small et al., 2015) during which actors form network ties reflecting newly shared foci of social interaction that “actively bring people together or passively constrain them to interact” (Feld, 1981, p. 1018). This invites a closer look at how the emerging personal networks of newcomers develop in terms of the number as well as the stability or turnover in ego-alter ties.

As a means to analyze both changes in personal network size and composition over time, we adopt the framework developed by Small et al. (2015) for their study on the stability of the core discussion network of graduate students. It defines different forms of personal network development based on a matrix of three by two categories of change: “Since an actor may either add or not add and either drop or not

drop ties, her network may change in size (increase, decrease or remain the same) and composition (experience replacement or no replacement)” (Small et al., 2015, p. 92). In answer to the authors’ call for “additional studies among new entrants in other kinds of contexts” (Small et al., 2015, p. 101), we transfer their framework to the study of organizational socialization at the workplace.

To do so, we adjust the framework from the core discussion network to its application for extended personal networks, bounded by their organizational context. That is, for the study at hand, focal actors were not asked to identify a limited number of alters they confide in, but invited to report as many contacts as they consider relevant within their organizations. Like the core discussion network, such extended personal networks can increase, decrease, or stabilize in size over time. They are just likely to do so on a larger scale, given that the number of listed alters is not capped.

When it comes to changes in composition, however, extended personal networks are characterized by far less stability than the core discussion network (Degenne and Lebeaux, 2005; Fischer and Offer, 2020; Morgan et al., 1996; Small, 2017), so that we must assume that some ties are always added or dropped. As such, we cannot use the authors’ original distinction between “the presence or absence of replacement” (Small et al., 2015, p. 97). For extended personal networks, alter replacement is instead taken to describe the part of a network’s composition that changes over time. Its opposite is not the absence of replacement, but rather the part of the network’s composition that shows stability (referred to as ‘alter recurrence’ in the following). In other words, we define change in network composition as the relative share of alters who are replaced between points in time as opposed to those who remain the same.

Understanding personal network development as a combination of changes in network size and composition facilitates a systematic investigation of how it affects outcomes of interest. For our study, that outcome is the mobilization of intra-organizational social capital by newcomers. We operationalize social capital as a multi-dimensional construct that comprises various types of resources (Lin, 2001), representing different forms of social capital (Adler and Kwon, 2002; Nahapiet and Ghoshal, 1998; Seibert et al., 2001). For the specific context of organizational newcomers, we distinguish between resources relating to task-performance support, initial career promotion, and socio-emotional integration, since this both represents a validated model of social capital for marginal actors in organizations (Iseke, 2007; Jokisaari and Nurmi, 2012) and befits the commonly tripartite definitions for socialization objectives (Chao et al., 1994; Morrison, 1993; Ostroff and Kozlowski, 1992).

It will be informative to consider the effects of personal network development on the rather instrumental resources relating to task-performance support, resources of more strategic value for the newcomers’ initial career promotion, and those of a primarily affective nature relating to socio-emotional integration separately, since we know that “there is a likely link between the specific nature of network resources and the types of ties required for optimal channeling of those resources” (Gulati et al., 2011, p. 218). While each can be valuable to newcomers in their own right (Chao et al., 1994), however, social capital as an overarching construct is defined by “the synergetic combination of the dimensions” (Fugate et al., 2004, p. 18).

We consider social capital to be mobilized when egos report instances of having received the respective resources from their intra-organizational network ties (Small and Sukhu, 2016; Smith et al., 2012), either by actively seeking access to resources or through alters providing them on their own initiative. As such, social capital mobilization both presumes and fosters the development of network ties (Fang et al., 2011; Small and Sukhu, 2016). Both directions of the dynamic will also be “either formally or informally mediated” by the institutional roles and positions as well as norms and expectations characterizing a newcomer’s organizational context (Small, 2017, p. 72). That is, while socialization represents a transition characterized by uncertainty, its

institutionalization makes it “subject to both policies and norms of behavior, decorum and support that dramatically lower the risk of exposing vulnerability” (Small, 2017, p. 106) for the actors involved.

Indeed, theory-based arguments can be made for various predictions regarding the connection between personal network development and the mobilization of social capital for organizational newcomers as a particular group of focal actors (Small, 2017). Here, we investigate two sets of hypotheses: Under the conditions of H1, we argue that changes in network composition will predict the amount and kinds of resources that newcomers mobilize over time. Under the conditions of H2, we argue that for organizational newcomers, it will rather be changes in network size that predict mobilization.

2.1. Change in network composition predicts social capital mobilization (H1)

The assumption underlying our first set of hypotheses is that an increase in social capital mobilization for newcomers will depend primarily on how their networks develop in terms of *composition*. Given the particular scenario of organizational socialization, we expect that many of the initial contacts for newcomers are formally assigned and that ties formed upon organizational entry may not be found stable or rewarding enough – in affective, strategic, or instrumental terms – to be continued as socialization progresses (Carstensen et al., 1999; Lane and Sweeny, 2019; Levin and Walter, 2018; Slaughter and Zickar, 2006). Indeed, socialization trajectories, especially if institutionalized, are often designed to prompt and facilitate shared interactions between newcomers and insiders in several parts of the organization (Jokisaari and Nurm, 2012; Small et al., 2015). Extant research has found that such propinquity, referring to a mix of physical proximity and ease of access between ego and alters, is in fact the most important driver of tie formation in organizational settings (Lane and Sweeny, 2019; Wrzus et al., 2013). Ideally combined with joint activities, propinquity also facilitates the mobilization of ties for resources relevant to the context in which they develop (Dahlander and McFarland, 2013; Feld, 1981; Small and Sukhu, 2016). We therefore formulate as our first hypothesis H1(a) that a higher share of alter replacement in intra-organizational networks will increase the overall mobilization of social capital for newcomers over time and specify the theoretical foundations of our predictions for the different types of social capital in the following.

H1. (a): Alter replacement predicts an increase in the mobilization of overall social capital.

2.1.1. Task-performance support

As for the first type of social capital considered here, task-performance support involves access to rather “codifiable information, explicit knowledge, and tangible resources” (Gulati et al., 2011, p. 218). These are considered easier to channel, without placing particular demands on a tie, so that the duration of contact or accumulated tie strength between actors is taken to be less critical for their mobilization (Cross and Cummings, 2004; Hu and Randel, 2014; Wang and Noe, 2010). Following this logic, alter recurrence would not be required for newcomers to increase the task-performance support derived from their networks over time. Alter replacement, on the other hand, can be expected to help newcomers gain access to more instrumental resources, since “actors in different network positions have differential access to resources and can provide different opportunities and resources to newcomers” (Korte and Lin, 2013, p. 412). As their socialization progresses and newcomers assume more responsibility or different tasks within their workgroups, the kinds of resources that represent instrumental support for them will likely change, as well (Ostroff and Kozlowski, 1992). Presuming any degree of focal actor discretion, these developments would be reflected in a changing network composition, reflecting ego’s evolving situation and needs (Lane and Sweeny, 2019; Shah et al., 2018). Newcomers will also find themselves in a better

position to reciprocate and ‘give back’ over time. As they settle into their roles, the learning curve of socialization typically flattens and newcomers increase their access to intra-organizational resources (Bauer and Erdogan, 2014; Korte and Lin, 2013), making them more attractive as partners for resource exchanges (Harris et al., 2014; Iseke, 2007; Mehra et al., 1998). Hypothesis H1(b) respectively argues that a higher share of alter replacement in intra-organizational networks will increase the mobilization of instrumental resources over time, as newcomers seek changing types of support and become increasingly sought out as exchange partners by different alters.

H1. (b): Alter replacement predicts an increase in mobilized task-performance support.

2.1.2. Initial career promotion

When it comes to the mobilization of more strategic resources of value for a newcomer’s initial and future career steps, those are typically provided by organizational actors with influence on the respective decisions (Cross and Cummings, 2004; Wang and Noe, 2010). Such alters in positions of power and control at the organization are usually harder to reach, due to their extensive responsibilities (Iseke, 2007), and less likely to be found among the initial contacts of newcomers (Allen et al., 1999; Brass et al., 2004) or in their closest proximity upon starting out (Fang et al., 2011; Higgins and Kram, 2001). Alter replacement in newcomer networks is thus taken to be especially beneficial for this type of social capital. Adding new or different alters to their networks allows newcomers to develop ties to a wider range of organizational insiders, including those proverbial ‘friends in high places’ (Devadason, 2011; Pieterse, 2003). Over time, newcomers also build up their intra-organizational ‘know-who’, meaning that they become more aware of different actors, their roles, and the relationship structures between them (Allen and Shanock, 2013; Marineau, 2017). This makes them less dependent on formal structures and assigned contacts for their personal network development, so that newcomers show increasing agency (Lane and Sweeny, 2019) and become more deliberate about which ties to initiate, develop, or discontinue (Levin and Walter, 2018). This will allow them to invest in selected ties, offering access to different, additional, or more (relevant) resources (Carstensen et al., 1999; Levin and Walter, 2018; Yu et al., 2013). In addition, newcomers may be motivated to shed initial ties so as not to get stuck with a perception as ‘the new kid on the job’ as they gather experience at the organization, thus preferring new ties that they can enter at eye level. Hypothesis H1(c) hence argues that a higher share of alter replacement in intra-organizational networks will especially increase the mobilization of career-strategic resources for newcomers over time.

H1. (c): Alter replacement predicts an increase in mobilized initial career promotion.

2.1.3. Socio-emotional integration

When it comes to the more tacit, complex, and expressive resources involved with socio-emotional integration, on the other hand, we would expect that mobilization is enhanced by alter recurrence, instead (Higgins and Kram, 2001; Levin and Walter, 2018). Where the development of personal network composition is characterized by stability, rather than turnover, this is taken to allow for initial ties between newcomers and insiders to grow into stronger, more durable relationships. One particular ‘strength’ ascribed to such strong ties is that they can offer broadband channels to exchange resources at a higher volume and with a higher complexity (Burt, 2001; Lin, 2001; Nahapiet and Ghoshal, 1998). There is substantial evidence in extant research for this ‘strength of strong ties’-argument with regard to affective resources such as “friendship, counselling, acceptance and confirmation, and sharing beyond work” (Higgins and Kram, 2001, p. 268). Social capital theory has shown that a tie history between actors fosters interpersonal trust (Riemer, 2005), tie strength (Oh et al., 2004), network cohesion and closure (Ho et al., 2006) – all conducive to resource exchanges (Burt,

2005). With alters remaining in a newcomer's network, there will be opportunities for repeated interactions, giving ego and alters the time required for their relations to establish trust and reliability (Ashforth et al., 1998; Ripperger, 2003; Slaughter and Zickar, 2006). As contact becomes more frequent, intense, and/or effective, the resulting ease of interaction between actors reduces transaction costs and friction losses (Burt, 2005; Leana and Van Buren, 1999; Pena-López and Sánchez-Santos, 2017). This in turn leads to ongoing cooperation and mutual obligations, which further reinforce tie strength (Fang et al., 2011; Lee, 2009) so that strong ties have also been shown to last longer (Degenne and Lebeaux, 2005; Fischer and Offer, 2020).

While more often theoretically induced than empirically tested (Small, 2017), this line of argument provides the very basis of the social 'capital' metaphor and the implicit parallels it draws to economic principles of value accumulation through investments (Andriessen and Gubbins, 2009; Prusak and Cohen, 2001; Robison et al., 2002). It points to a central premise of social capital theory, pertaining that ties are more likely to channel resources when time and commitment have been invested into building a relationship that motivates alters to support ego (Lee, 2009; Lin, 1999; Walsh et al., 2018) and offers them at least the prospect of some form of future reciprocity (Burt, 2005; Portes, 1998; Riemer, 2005). Newcomers would first need to accumulate such investments and social capital 'creditability', though (Bourdieu, 1983; Coleman, 1990; Lin, 2001). This suggests that social capital mobilization will increase when their network composition shows a higher share of alter recurrence, offering stability for the ego-alter ties that remain in the network. Vice versa, hypothesis H1(d) predicts that a higher share of alter replacement in intra-organizational networks will decrease the mobilization of affective resources for newcomers over time.

H1. (d): Alter replacement predicts a decrease in mobilized socio-emotional integration.

2.2. Change in network size predicts social capital mobilization (H2)

The assumption underlying our second set of hypotheses is that an increase in social capital mobilization for newcomers will depend first or foremost on how the size of their personal networks develops. This is explicitly not intended to invite a comparison between network sizes in absolute terms. For one, "counts of relationships will never measure network value" (Burt, 2005, p. 11), since different focal actors will have different preferences or aptitudes regarding how many ties their personal networks (are perceived to) comprise (Gulati et al., 2011; Smith et al., 2012). For the other, our investigation here focuses on networks at the workplace, which are by definition bounded by and relative to the size of the organization (McCarty et al., 2019). Instead, our argument focuses on the growth of network size as within-person change, measured by how the net number of alters reported over the course of a given ego's socialization develops. Given that newcomers have only just joined an organization, building up a personal network to begin with may indeed take precedence over questions of composition. We respectively formulate as hypothesis H2(a) that an increase in network size predicts the mobilization of more social capital for newcomers over time. This allows us to further specify the predictions of H2 for the different types of social capital in the following.

H2. (a): Network growth predicts an increase in the mobilization of overall social capital.

2.2.1. Task-performance support

If the personal network development of newcomers was to initially follow the logic of 'the bigger, the better', this is taken to apply especially to the mobilization of resources relating to task-performance support. An increasing number of network ties is taken to provide focal actors with a larger repository of resources to draw on (Choi et al., 2018; Fang et al., 2011; Korte and Lin, 2013). This argument is

corroborated by empirical research such as Lubbers et al. (2019, p. 67), showing that "acquaintanceship volume is associated with social support availability." It improves the odds for ego to find the task-performance support they need, either among extant network contacts or through their referral to others (Fang et al., 2011; Korte and Lin, 2013). Further, their chances are increased to identify and develop ties to alters with whom they share personal or professional interests and shared objectives, which motivate mobilization and reciprocity (Dahlander and McFarland, 2013; Spillane et al., 2012).

Within the specific context of organizations, a wider network is more likely to entail connections to alters in different roles and departments (Hogan et al., 2020), thereby expanding the range of skills, knowledge, and experience that a newcomer can potentially access (Choi et al., 2018; Ferri et al., 2009; Korte and Lin, 2013). Intra-organizational ties are found to be particularly instrumental where they reach across and beyond the 'blueprint' of formal organizational structures, as such (Burt, 2005; Flap and Völker, 2001; Lane and Sweeny, 2019). This is also where opportunities arise for ego to benefit from the "information arbitrage" offered by broker positions spanning structural holes at an organization (Burt, 2005, p. 17). All this is taken to increase a newcomer's access to non-redundant and diverse resource repositories (Ferri et al., 2009; Granovetter, 1983) that are known to enhance the instrumental value of personal networks (Hofstra et al., 2015; Stea and Pedersen, 2017). Hypothesis H2(b) thus predicts that an increase in network size will especially predict the mobilization of more instrumental resources for newcomers over time.

H2. (b): Network growth increases the mobilization of task-performance support.

2.2.2. Initial career promotion

We further expect that a growing personal network will help newcomers to increase their mobilization of initial career promotion. The strategic resources involved tend to be very organization-specific and primarily passed on through personal contact (Häussling, 2014), rather than codified (Jokisaari and Nurmi, 2012; Yu et al., 2013), so that an expanding network enhances opportunities for access (Fang et al., 2011; Korte and Lin, 2013). What is more, a growing personal network on the job reflects how newcomers become increasingly embedded in an organization's relational structures (Allen, 2006; Holtom et al., 2006). Such embeddedness signals that they have crossed the 'inclusionary boundary', shedding their outsider status (Bauer et al., 2007; Jokisaari and Nurmi, 2012). This will reduce the asymmetry of ties between newcomers and insiders and – by extension – the resource exchanges they channel (Agneessens and Witte, 2012; Fang et al., 2017; Iseke, 2007). With regard to career-strategic resources, organizational embeddedness has another important and self-reinforcing effect, in so far as that "a well-connected individual is more likely to collaborate with other well-connected individuals" (Dahlander and McFarland, 2013, p. 91). Assuming that those alters at the organization who can provide initial career promotion to newcomers will have central positions in its network structures, newcomers will benefit from expanding the number of ties pulling them in and away from their initially marginal status (Higgins and Kram, 2001; Ibarra, 1993). Hypothesis H2(c) therefore argues that an increase in network size will predict the mobilization of more career-strategic resources for newcomers over time.

H2. (c): Network growth increases the mobilization of initial career promotion.

2.2.3. Socio-emotional integration

We have argued that a growing personal network will increase newcomers' access to task-performance support, in particular, as well as to initial career promotion. However, any actor's capacity to invest in network ties is limited (Gargiulo and Benassi, 2000; Moore et al., 2018). Considering that ties added not only "bring benefits, they also carry costs – obligations commensurate with their benefits" (Small et al.,

2015, p. 93), heavy investments in expanding the number of ties in one's network will entail trade-offs regarding the frequency and intensity of contact to individual alters (Granovetter, 1983; Walsh et al., 2018). Vice versa, efforts invested in the development and maintenance of extant ties will likely impose limits on the time and energy that newcomers can expend on initiating new ties (Levin and Walter, 2018). When it comes to affective resources best channeled through strong, committed ties, social capital mobilization is hence expected to decrease with a growing personal network. Based on the same logic, a different line of argument predicts the opposite effect for a decrease in network size. It represents the basis of socioemotional selectivity theory, which has been found to explain why social support increases while personal networks shrink in size as focal actors age (Bidart and Lavenue, 2005; Grandgirard et al., 2003; Kalmijn, 2012).

Socioemotional selectivity theory surmises that, as actors mature, they “increasingly invest in fewer contacts that yield more emotional or practical benefits” (Kalmijn, 2012, p. 188). Given that newcomers go through a (high-speed) lifecycle during socialization, they too ‘mature’ as organizational actors. Their situations are further comparable, since the perceived availability of time and resources to invest in tie development is limited upon organizational entry, when newcomers must simultaneously handle the stressors of organizational socialization (Bidart and Lavenue, 2005; Small, 2017) and “master new skills, take on new responsibilities, and fulfill new obligations” (Small et al., 2015, p. 93). Especially within an organizational context, more ties will not necessarily equal more social capital (Gargiulo and Benassi, 2000; Riemer, 2005) and especially in times of transition, actors have been found to shed or replace ties to a significant degree, even from their core networks (Small, 2017). Like focal actors in old age, newcomers may thus be motivated to focus their attention on ties perceived as the most meaningful (Grandgirard et al., 2003), because “the more severe the restrictions on time, effort, and emotion, the more individuals will experience pressures to combine their interactions” (Feld, 1981, p. 1019). Limiting or even reducing the overall number of network ties would allow them to concentrate their investments on maintaining those which they consider most affectively rewarding, or it would free up resources for initiating new ties to meet their changing needs (Grandgirard et al., 2003; Levin and Walter, 2018). Hypothesis H2(d) respectively argues that an increase in network size will predict the mobilization of less affective resources for newcomers over time.

H2. (d): Network growth decreases the mobilization of socio-emotional integration.

2.3. Additional factors of influence

Considering the empirical complexity of personal networks, their development is likely to go through any number of combinations regarding changes in composition and size. As it has been indicated above, alter recurrence and alter replacement are further presumed to coexist within extended personal networks at the workplace, such as they are investigated here. It is for these reasons that “the generation of perspectives with multiple and overlapping predictions” is considered a particular strength of the applied theoretical framework (Small et al., 2015, p. 101). It allows us to compare the explanatory value of the hypotheses when confronted with longitudinal data on the development of personal networks and social capital mobilization during newcomer socialization in the following.

Besides the delineated differences expected between the three types of social capital (Iseke, 2007; Jokisaari and Nurmi, 2012), there are further influencing factors to be taken into consideration. First, it could be informative to see in how far the impact of personal network development on social capital mobilization depends on the type of organization in which newcomers are socialized (Nugent and Abolafia, 2006; Perry-Smith and Shalley, 2015; Small, 2009). Since “structural factors provide the context within which personal ties form” (Moore, 1990, p.

734), the distinction of organization types in the panel helps to explore how this context “shapes the variability that we can potentially observe” (Rousseau and Fried, 2001, p. 3). We thus probe for notable differences regarding newcomers who joined the smallest and not-for-profit organizations in our sample, to see whether their scope and/or organizational cultures make them more prone towards alter recurrence increasing social capital mobilization. We also check whether there are discernably different patterns in findings for newcomers who joined multinational enterprises, since alter replacement may represent a stronger force in those organizations at the highest end of the size range in our sample.

Second, we know from extant research that the gender of organizational actors not only affects their perceived agency and tie development strategies (Kumra and Vinnicombe, 2010; Metz and Tharenou, 2001), but also their access to alters and resources in varying network structures (Ibarra, 1993; Moore, 1990). Studies on personal network development over the life course have found that gender differences relate to network composition, rather than network size (Wrzus et al., 2013), with female actors maintaining a higher share of (strong) kinship ties than male actors (Moore, 1990). Longitudinal research indicates that this is because the former more often fulfil a role as ‘kinkeepers’, sustaining familial ties by keeping contact and fostering ongoing exchanges (Leach and Braithwaite, 1996; Moore, 1990). Transferred to the context of organizational socialization, initial ties to formally assigned supervisors and immediate work groups are comparable with kinship ties to the degree that they are “readymade, an advantage to persons with scarce time to develop new relationships” and rather predisposed or normatively obliged to support ego (Moore, 1990, p. 727). If newcomers differ in the degree to which they maintain such ‘readymade’ ties at the organization, this will likely be reflected in how their personal networks develop with regard to alter recurrence and alter replacement. Thus, our analysis will also check for patterns depending on the newcomers’ gender.

3. Method

We draw on a purposeful sample of newcomer network data to search for empirical evidence for the validity of the formulated hypotheses and our theoretical predictions (not their representative testing for confirmation). The data were derived from a three-year panel study in Germany conducted by the first author, briefly described in the following.

3.1. Sample

The panel study followed a group of 28 young adults as they entered their first professional employments as recent high school graduates at a median age of 19 (between 17 and 20 years). They were hired and socialized at different organizations, but joined together in a cohort to follow academic lectures in an International Business Bachelor program that complemented their training on the job. Through this academic element of their socialization, the newcomers were invited to participate in a longitudinal research project. Since they returned to university regularly to attain their Bachelor's degree, the cohort could be approached repeatedly for extensive, semi-structured interviews about the development of their personal networks and social capital mobilization.

Supported by this form of field access, it was possible to gather complete sets of data over three waves for 26 of the original group of 28 newcomers. The other two left their organizations, effectively dropping out of the panel (representing 7% attrition). Two more were excluded from the analysis, here, due to a lack of comparability of their employment situations or trajectories (Firestone, 1993). The remaining group of 24 comprises newcomers socialized in nine different organizations, including a small-to-medium sized enterprise (SME), a public-private partnership (PPP), three large enterprises (LEs) as well as

four multi-national enterprises (MNEs). Industries range from IT solutions and financial services over producers of medical and heavy equipment to construction and pharmaceuticals.

When registering at the university, 62 % of the newcomers in the panel group self-identified as female and the rest indicated their gender as male. While the extensive and repeated interviews offered an opportunity to develop trust and to address their preference regarding gender categories or pronouns, none of the newcomers raised the topic themselves and they were not actively prompted to do so. Binary as such, the data point is insufficient as a basis to explore the role of gender identity in depth, but it allows us to check for patterns regarding differences between actors categorized as male and female as observed in prior studies (Leach and Braithwaite, 1996; Moore, 1990). With its slight majority of female members, the panel group is considered typical for tertiary education programs in the humanities and social sciences in Germany (Francesconi and Parey, 2018).

3.2. Data collection

At three points of measurement, the first author conducted semi-structured interviews with the newcomers in the panel. The first wave of these interviews took place after they had spent three months at their respective organizations (T1), the second after 12 months (T2), and the third after 18 months of accumulated time on the job (T3). Since pre-existing ties to actors at the organizations were exceptionally few, the data gathered at T1 are considered the study's baseline measure for the initial network ties emerging for newcomers during their socialization. It marks the end of formal onboarding (mostly institutionalized en bloc within the first few weeks upon entry) and an initial assignment at the team or department that the newcomers joined. Ties reported then are compared to those listed at T2 (offering a more extended socialization phase) and at T3 (marking a time when newcomers have had sufficient time to become embedded as insiders).

A standardized part of the interviews collected structured data about the newcomers' personal networks and mobilized social capital in a three-step approach. First, a list of name generator questions was used to facilitate the recall of contacts at the organization (see Appendix A). They were designed and pretested to elicit not just strong ties in ego's immediate proximity, but also weaker ties, and even latent contacts at the organization (Degenne and Lebeaux, 2005; Lerner et al., 2014). They also did not inquire about one tie function, in particular, like friendship or advice networks. Instead, the objective was to generate a broad and comprehensive picture of the newcomers emerging intra-organizational network as the opportunity structure from which they could have potentially drawn resources. A final prompt always invited respondents to look over the names already recorded and add anyone else that they would like to see included.

Second, respondents were asked to characterize each of the listed contacts in terms of alter attributes, such as the person's gender, role at the organization, and perceived age difference between them. The name interpreters further included tie attributes, such as the frequency of contact and its intensity on a professional as well as on a personal level. Third, newcomers were asked to indicate which alters had provided them with resources in terms of social capital, based on a set of 19 statements adapted from Iseke's (2007) inventory of social capital for marginal actors in organizations. The statements were adjusted and pretested for the specific situation of newcomers and organizational socialization (see Appendix B). Examples include: "This person has taught me a lot on the job" (relating to task-performance support); "This person has made sure that my performance becomes visible and I get credit for it" (relating to initial career promotion); or "This person has been a source of energy or motivation for me at work" (relating to socio-emotional integration). Newcomers were encouraged to continue to add names to their alter lists, if recall was triggered by these questions of resource mobilization. This was to better reflect their networks as they were lived in practice (Small, 2017).

All prompts remained largely unchanged over the three panel waves, except for minor adjustments to address changes in the newcomers' socialization trajectory (such as adding a name generator to inquire about alters met during foreign assignments). Respondents were not confronted with their alter lists from prior waves, so that for each point of measurement, the network was recalled based on "mental alter sampling" (Fischer and Offer, 2020). Meanwhile, the name generators did include a specific prompt at T2 and T3, asking: "Are there any employees you've met during earlier assignments with whom you are still in contact now?"

This "formalized inventory" (Wald, 2014) collected data regarding which kinds of ties to which kinds of organizational insiders provided newcomers with which kinds of social capital resources during socialization. In order to reduce respondent burden, newcomers were not asked to also report alter-alter ties. Given the cognitive strain and length of the interviews as it were (see Table 1), this was considered a necessary trade-off to prevent panel attrition. Consequently, the panel study provides rich data on behavioral and relational dimensions, focusing on change in network size and composition, while accepting the lack of measures regarding network structure as a limitation (Lerner et al., 2014; McCarty et al., 2019).

3.3. Data processing and approach

To validate our hypotheses, we assessed the probability of newcomers to increase their social capital mobilization depending on changes in the composition (H1) or size (H2) of their personal networks over the course of the panel.

With regard to the independent variables, change in network size was calculated as the delta between the net number of alters in a newcomer's reported network at the first and last waves of measurement, to include sufficient time after the baseline measure at T1 for ties to develop, dissolve, and/or return (Levin and Walter, 2018). To determine change in network composition, ties were compared between T1 and T2 as well as T3. Alters were categorized as recurring if they were reported at two or more waves and as replaced if they were reported at a single wave, only. Their count was then set in relation to the overall number of unique alters listed by a newcomer throughout the panel.

Regarding the dependent variable of change in social capital, we computed the delta for each respondent's reported resource mobilization between T1 and T3. This was considered a meaningful indicator for developments between the expectedly lopsided provision of support during initial socialization and a more mutual exchange of network resources to be attained between ego and alters towards the final panel measure. Since there was only one case in the sample that did not show a net difference for the overall construct of social capital, it was combined with the cases reporting a decrease, resulting in a dichotomized outcome variable that categorized newcomers as either showing an 'increase' or 'no increase' in mobilized resources over time. The process was repeated per type of social capital, depending on the change of resources reported as mobilized for the prompts relating to task-performance support, initial career promotion, and socio-emotional integration, respectively. For all three, all cases clearly fell under the 'increase' or 'no increase' categories.

4. Findings

We begin with an exploratory analysis of the descriptive measures derived from the panel. Besides providing a richer characterization of the sample, this is considered to offer an informative value in its own right, regarding the scarcity of longitudinal data on personal networks and social capital development (Degenne and Lebeaux, 2005).

4.1. Descriptive analysis

Table 2 shows how the newcomers' personal networks developed in

Table 1

Duration of interviews at the three points of measurement.

(N = 24)	T1			T2			T3		
Duration of Interviews [hrs:mins]	<i>Mdn</i>	<i>Min</i>	<i>Max</i>	<i>Mdn</i>	<i>Min</i>	<i>Max</i>	<i>Med</i>	<i>Min</i>	<i>Max</i>
Median length and range	1:05	0:43	1:40	1:15	0:44	1:47	1:22	0:49	2:07

Table 2

Descriptive measures on panel data and exploratory data analysis.

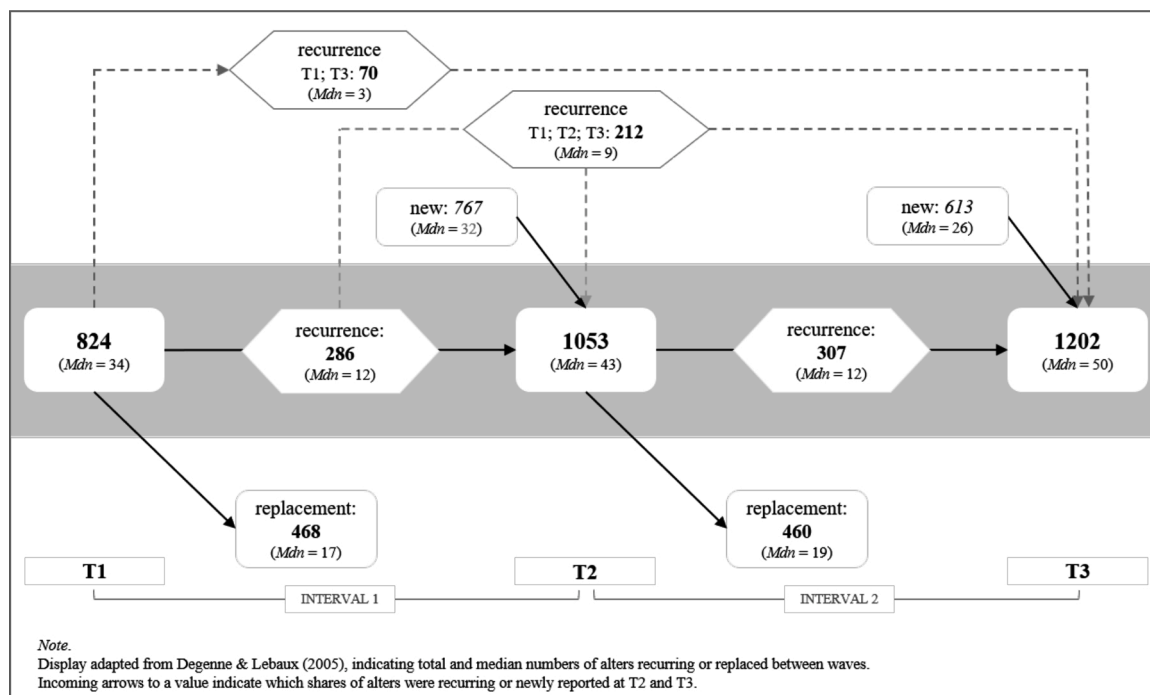
(N = 24)	T1			T2			T3		
Network size	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>
Size of reported network ¹	34	34	11.3	43	44	11.3	50	50	15.2
Size of mobilized network ²	19	21	6.3	32	33	8.9	41	38	12.1
Mobilized social capital ³	113	128	53.2	175	186	85.7	192	196	73.4
> task-performance support	37	45	22.0	67	73	39.4	73	77	35.4
> initial career promotion	21	23	14.0	33	34	16.9	34	37	17.9
> socio-emotional integration	53	60	27.9	64	78	42.4	79	81	33.0
Relative mobilization [%] ⁴	19.7	20.5	6.5	21.6	22.5	9.2	20.7	22.1	10.1
> task-performance support	32.3	31.1	11.0	27.6	30.8	12.4	27.5	30.5	13.3
> initial career promotion	15.6	18.6	8.6	15.8	17.2	8.5	14.7	17.4	8.9
> socio-emotional integration	43.4	46.6	13.1	34.1	37.4	13.8	34.5	36.8	14.5

¹ Number of network alters listed in interviews.² Number of ties mobilized for resources.³ Resources reported as provided by alters.⁴ Resources reported as mobilized in relation to those inquired about times the number of ties listed.

terms of size and resource mobilization, indicating median and mean values as well as standard deviations. Over the three waves of measurement, the median number of alters reported during the network interviews increased by 26.5 % between T1 and T2 (first interval) and shows another increase of 16.3 % between T2 and T3 (second interval). Regarding the median number of ties reported to have provided newcomers with resources, the increase lies at a full 68.4 % in the first interval and another 28.1 % in the second. So, not only did the size of the newcomers' reported networks increase over time, they also indicated a

growing number of ties in their mobilized networks (Smith et al., 2012). For both, the increase is markedly steeper within the first year at their organizations and then continues to grow more moderately.

In terms of social capital mobilization, there is an increase in the absolute numbers of resources reported as mobilized. This applies both to the overall construct of social capital as well as to the different types when considered separately, although the increase is less pronounced for initial career promotion and flattens out in the second interval. As the size of newcomer networks increases, so does the overall volume of

**Fig. 1.** Change in network composition aggregated across the panel.

resources derived from them. Yet, it remains fairly stable in relation to the given network size. Across the three points of measurement, newcomers reported a median of 20.7 % of the resources as mobilized that would have potentially been available in their networks based on the number of listed ties and the prompts inquired about. Interestingly, this share varies merely between 19.7 % at T1, 21.6 % at T2, and 20.7 % at T3 (see Table 2). So, while newcomers increased the size of their networks and the number of ties providing resources, a steady 80 % of the potential social capital in their networks was not mobilized.

With regard to changes in network composition, Fig. 1 provides an aggregate overview of how many alters were reported and how many of those were recurring or replaced between waves. It offers absolute and median values for the panel in a summary display as introduced by Degenne and Lebaux (2005). With individual newcomers reporting between 60 and 145 unique alters throughout the panel, the study draws on a total of 2204 distinct ego-alter ties.

On the individual level, newcomers reported a median of 92 unique alters across the panel. As expected in our discussion of the adapted theoretical framework, the extended personal networks show considerable alter churn. The number of alters recurring at more than one wave ranges between a mere 7 and 44. Even given the organizational setting of newcomer socialization, with formal roles and structures impacting tie formation and maintenance, the median number of alters who were replaced (65) is more than double than that of those who were recurring (28). Fig. 2 shows the respective prominence of alter replacement in each of the 24 newcomer networks. In relative terms, alter replacement ranged from 58 % to a maximum of 92 % of the unique alters listed. The median of 68 %, indicated as horizontal line in Fig. 2, is similar to the degree of alter turnover observed in comparable studies, ranging between 63 % and 82 % (Choi et al., 2018; Degenne and Lebaux, 2005).

Fig. 3 shows the development of each newcomer's network composition in detail. We use the format of exhibits as developed by Small et al. (2015), except that there is one exhibit per individual ego, here. Each line represents a unique ego-alter tie reported during the panel interviews by a respective focal actor. Moving from bottom to top, the lines at the base show ties to those alters who were named in all three interviews; then, the interrupted lines represent ties that were reported at T1 and again at T3, but were not listed by ego at T2. Following in pillars from left to right are the ties to alters reported only at T1, at T1 and T2, only at T2, at T2 and T3, and finally those reported only at T3. As such, the exhibits in Fig. 3 offer a visual summary of network change that does not require three distinct network states to be layered up in a single map or sociogram. Such structural plotting makes it difficult to accurately and still intelligibly show which nodes were (not) present at which time (Degenne and Lebaux, 2005; Wu et al., 2016) and would

have added little value given our data on first-order dyads. In summary, the exploratory data analysis reveals the degree to which the newcomer's personal networks changed in composition during socialization. While personal networks grew in size and provided an increasing overall number of resources to newcomers, the stability in relative resource mobilization across the panel measurements indicates that social capital does not generally increase along with network growth, indicating initial evidence against the prediction of H2(a). We now turn to the question which differences in personal network development predict whether newcomers increase their social capital mobilization over time.

4.2. Inferential analysis

Table 3 shows the results from binominal logistic regressions, predicting an increase in social capital mobilization based on the change in a newcomer's network composition (measured as the share of alter replacement in relation to the number of unique alters reported by ego) and change in network size (measured as delta between the number of alters reported in the newcomer's network between points of measurement). They are listed and discussed first with regard to social capital as an overall construct and then separately per type of social capital. Consistent with the hypotheses, one-sided testing was used ($\alpha = .05$).

4.2.1. Findings regarding hypothesis 1

The first set of hypotheses (H1) pertained that change in network composition predicts an increase in social capital mobilization for newcomers. Indeed, there is indication of evidence for H1(a) in our data. With a higher share of alter replacement as independent variable, the odds for newcomers to mobilize more social capital over time increased significantly by 0.14 ($p = .027$). When the different types of social capital are considered separately, task-performance support represents the only type for which there is no significant effect, so that H1(b) cannot be substantiated, here. As a measure of change in network composition, alter replacement was not found to play a role for newcomers when it comes to increasing their access to instrumental resources during socialization. For resources relating to initial career promotion, there is a significant ($p = .038$) and positive effect as predicted by H1(c). The odds increased by 0.12, making the effect slightly weaker than for the overall construct of social capital, though. In fact, while we had predicted that alter replacement would particularly help newcomers to access more career-related resources, the effect is instead strongest for the mobilization of socio-emotional integration. Contrary to the prediction of H1(d), arguing that alter replacement would decrease the channeling of affective resources relating to socio-emotional integration, the opposite was found to be the case. With the

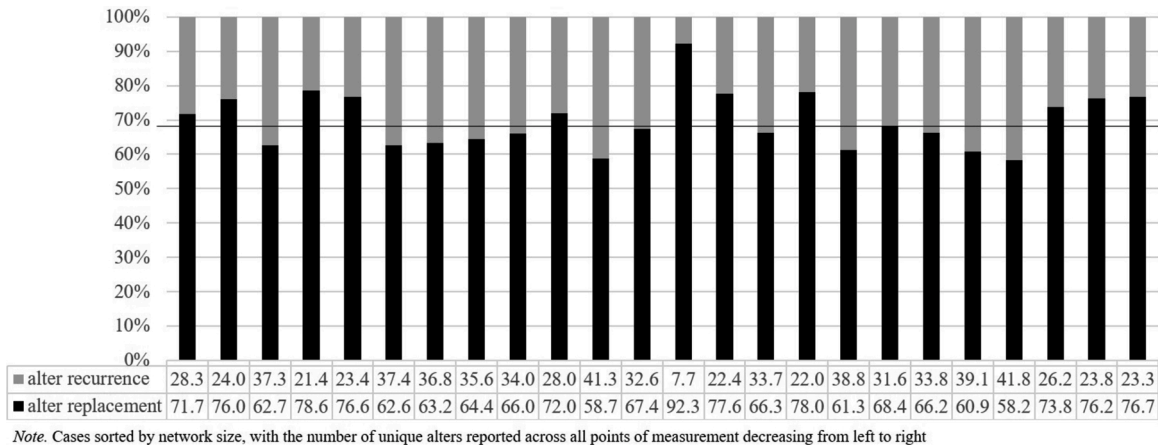


Fig. 2. Relative prominence of alter recurrence and alter replacement in each newcomer's network (in %).

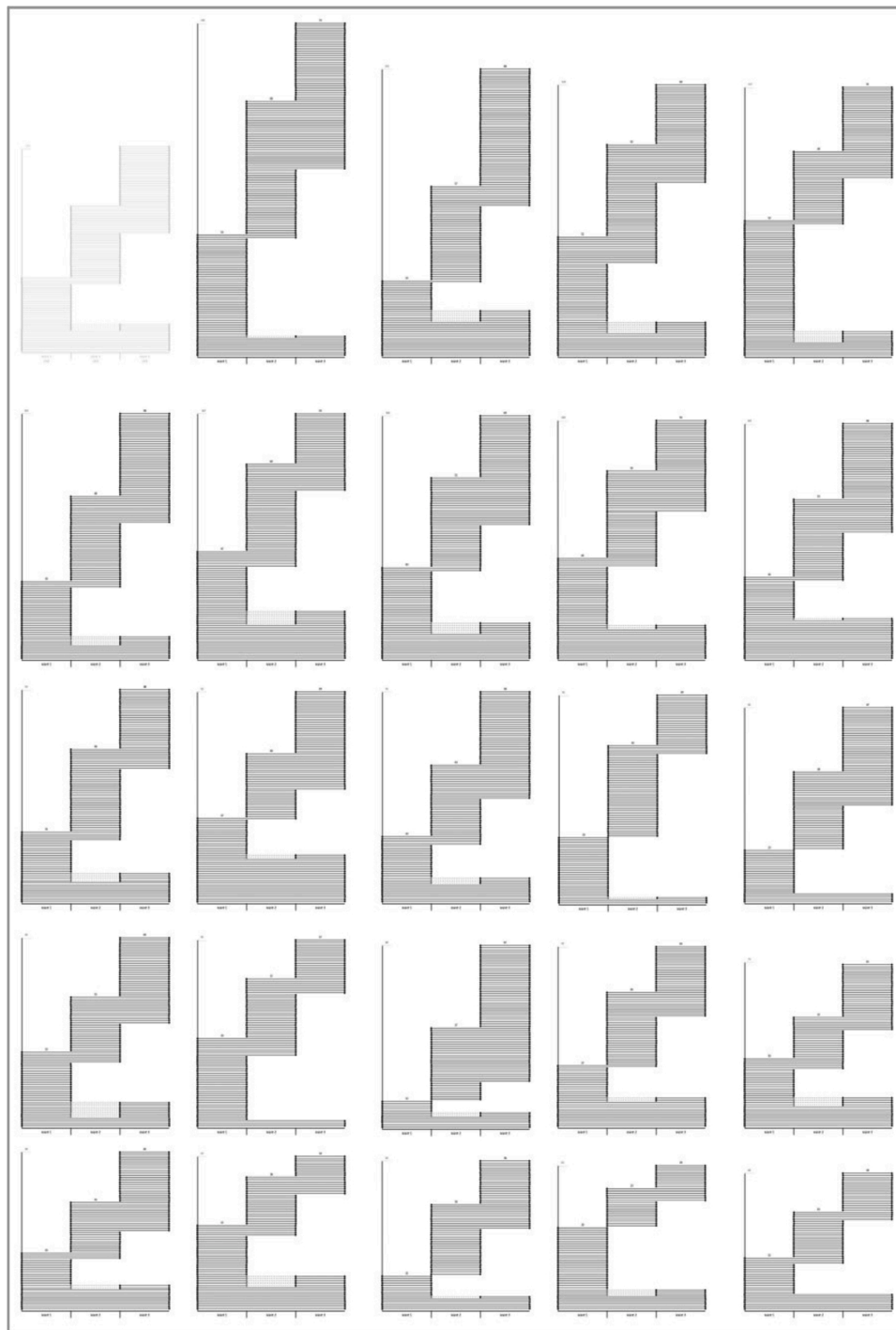


Fig. 3. Personal network development displays per ego.

Note. Exhibits adapted from Small et al. (2015), sorted by number of unique alters reported (descending), with median values shown in the top left.

odds improving by 0.19, the effect was stronger than for the overall social capital construct and significant ($p = .031$). Alter replacement helped newcomers also - and even especially - to mobilize more affective resources over time.

In summary, our findings for H1(a) indicate that alter replacement has a significant and positive effect on the overall mobilization of social capital for newcomers over time. When separating between different types of social capital, the effect is not significant for H1(b)/task-performance support, but it is for H1(c)/initial career promotion, and strongest for H1(d)/socio-emotional integration. Fitness measures indicated that the models are well calibrated, with expected and

observed event rates matching particularly well for task-performance support and socio-emotional integration. Higher Nagelkerke R^2 values further signal that the models explained a higher proportion of variance than those based on H2, to which we turn to now.

4.2.2. Findings regarding hypothesis 2

The second set of hypotheses (H2) posited that changes in the size of newcomer networks predict an increase in their social capital mobilization. However, we did not find a significant effect for H2(a) regarding the overall construct of social capital. While H2(b) predicted that network growth would particularly enhance task-performance support,

Table 3
Findings from the binominal logistic regression.

	Model									
	<i>b</i>	<i>SE</i>	<i>p</i>	95 % <i>CI</i> for			<i>R</i> ² Nagelkerke	<i>Classifications</i>		
				<i>LB</i>	<i>Odds ratio</i>	<i>UB</i>		<i>I</i>	% correct	<i>N</i>
H1/Higher alter replacement predicts an increase in the mobilization of:										
H1(a) social capital (overall)	0.13	0.07	.027*	1.02	1.14	1.28	0.24	61.5	62.5	63.5
H1(b) task-performance support	0.02	0.05	.313	0.94	1.03	1.12	0.01	69.2	45.8	18.2
H1(c) initial career promotion	0.11	0.06	.038*	1.01	1.12	1.25	0.20	60.0	70.8	78.6
H1(d) socio-emotional integration	0.17	0.09	.031*	1.02	1.19	1.38	0.33	20.0	83.3	100
H2/Network growth predicts an increase in the mobilization of:										
H2(a) social capital (overall)	−0.04	0.03	.097	0.92	0.96	1.01	0.10	69.2	62.5	54.5
H2(b) task-performance support	−0.02	0.03	.201	0.94	0.98	1.02	0.04	69.2	54.2	36.4
H2(c) initial career promotion	−0.03	0.03	.175	0.93	0.98	1.02	0.05	40.0	70.8	92.9
H2(d) socio-emotional integration	−0.08	0.04	.030*	0.86	0.92	0.99	0.27	40.0	83.3	94.7

Note. SE = standard error. One-directional testing. **p* < .05.

LB/UB = lower / upper bound for 95 % confidence interval.

Classification I/N = increase / no increase in mobilization.

by providing a greater repository of non-redundant resources for newcomers to draw on, there is no evidence for this in our data either. Nor is there support for H2(c), arguing that network growth would help newcomers to mobilize more initial career promotion by increasing their connectedness. The only significant effect found with regard to H2 relates to the mobilization of socio-emotional integration (*p* = .030). It confirms the direction predicted by H2(d), showing that the odds for newcomers to mobilize more affective resources over time is (1 / 0.92 =) 1.09 lower when their networks increase in size. In combination with the consistently negative *b*-values for the other types and overall construct of social capital mobilization, this suggests that if there were an effect of network growth on social capital, it would not predict an increase in resource mobilization. This matches our initial findings from the descriptive analysis.

In short, we have found for H2(a) that network growth has no significant effect on the overall mobilization of social capital in our data. Neither were our hypotheses regarding H2(b)/task-performance support or H2(c)/initial career promotion supported, whereas our findings for H2(d) indicate that a growing network size decreases the odds for newcomers to mobilize more socio-emotional integration over time.

4.2.3. Probing further

We report results from including our controls in the models for each of the sets of hypotheses in a combined table in Appendix C. Controlling for the newcomers' gender had no significant effect in the first steps. To control for the types of organization, we also compared the newcomers socialized in MNEs (*n* = 10) as well as those in the SME and PPP (*n* = 7), defining newcomers socialized in organizations on neither end of the size spectrum in our sample (*n* = 7) as the reference category. Again, none of the effects in the first step of the models were significant.

In the second step, results for the first set of hypotheses corroborate the significant effects found for H1(a), H1(c), and H1(d) as well as the lack of a significant effect for H1(b) when testing for the impact of alter replacement in addition to the controls. With regard to the second set of hypotheses, the lack of significant effects regarding H2(a) and H2(b) as well as the significant and negative effect for H2(d) are also substantiated. Appendix C indicates an additional significant effect with regard to H2(c) in the second step: When controlling for the newcomer's gender and the type of organization, the negative effect of network growth on the mobilization of initial career promotion becomes significant (*p* = .026). The direction and size of the effect, however, is almost diametrically opposed for newcomers depending on the type of organization (see Appendix C), with mobilization decreasing as networks grow for newcomers socialized in the SME and public-private partnership (PPP), while increasing for those in MNEs. If these differences cancel each other out across the sample, this could explain why initial

career promotion was the only type of social capital for which mobilization was shown to level out over the newcomers' extended socialization in the descriptive analysis.

As a final step in the analysis, our data was also to be questioned on the combination of both independent variables and controls. Given the limited number of cases, we opted for truth tables as a more case-oriented comparison between subsamples (Hollstein and Wagemann, 2014), offering an additional means to check the reliability of our findings. This approach helps to leverage smaller sample sizes as it "attends to interactions" between input variables (Firestone, 1993, p. 21), where more specified regression models cannot rely on statistical power.

Each newcomer's personal network development can be classified as a combination of changes in network size and composition (Small et al., 2015). Truth tables require for this classification to be expressed in dichotomous variables (Firestone, 1993; Hollstein and Wagemann, 2014). Thus, in terms of input categories, P stands for an increase in network size over time, which may be either true (1) or not true (0) for a given case. Q stands for the input category of change in network composition, which may show either more (1) or not more (0) than the sample's rounded average of 70 % alter replacement over time. Regarding the output variable R, social capital mobilization may either show an increase (1) or no increase (0). This results in 2³ = 8 theoretically plausible constellations as indicated in the three outer-left columns of Table 4.

Seven of the eight combinations were indeed observed in our data, with their case frequencies shown in the fourth column of Table 4. As such, the truth table indicates one logical remainder, that is, a plausible

Table 4

Truth table with plausible combinations, observations, and comparisons by subsample.

input categories		output	cases	compared by gender		compared by type of organization		
P	Q			female	male	SME/PPP	LEs	MNEs
1	1	1	3	2	1	1	0	2
1	0	1	5	2	3	1	3	1
0	1	1	5	4	1	1	2	2
0	0	1	0	0	0	0	0	0
1	1	0	2	0	2	0	0	2
1	0	0	5	4	1	2	1	2
0	1	0	1	1	0	0	0	1
0	0	0	3	2	1	2	1	0

Note: P = network size increases (true/false); Q = alter replacement > 70 % (true/false); R = mobilized social capital increases (true/false).

SME = small-to-medium sized enterprise; PPP = public-private partnership; LE = large enterprise; MNE = multi-national enterprise.

combination that was not empirically observed. There was no case in which social capital mobilization increased ($R = 1$) for a newcomer's network that did not grow in size ($P = 0$) and showed no above average share of alter replacement regarding change in its composition ($Q = 0$). In other words, the outcome of interest for our study was not observed to result from neither of the independent variables hypothesized to have an effect, which corroborates the relevance of the hypotheses that have been compared above.

The truth table further shows how often each combination of our independent variables did and did not result in an increase in social capital mobilization. Even dichotomized into a categorical outcome variable, higher alter replacement ($Q = 1$) accounts for the bigger share of cases with an increase in social capital mobilization ($R = 1$) and lower alter replacement ($Q = 0$) accounts for most of the cases showing a decrease in social capital ($R = 0$), which is in line with our findings from the logistic regression. An increase in social capital through a higher share of alter replacement ($Q = 1$) was reported not only by newcomers who simultaneously increased the size of their networks ($P = 1$), but also and even slightly more often when network size decreased ($P = 0$), which matches the arguments underlying socioemotional selectivity theory.

We can also use the truth table to compare the observed constellations of P , Q , and R being true or false between subsamples. In the absence of statistical power, the comparison between female and male newcomers helps us to check for possible differences. Taking both changes in network size and composition into consideration, female newcomers most often increased their social capital given that their networks decreased in size ($P = 0$) and showed higher than average alter replacement ($Q = 1$). This pattern is supported when looking at the reverse constellation, seeing that female newcomers most often reported a decrease in social capital when their networks increased in size ($P = 1$) and showed lower than average alter replacement ($Q = 0$). Meanwhile, male newcomers increased their social capital most frequently in constellations that show network growth ($P = 1$), while the pattern regarding alter replacement is not clear based on the limited number and distribution of cases. While we cannot offer conclusive evidence, here, it is thus worth noting that the social capital enhancing effect of alter replacement seems to apply in particular to the female newcomers in our sample.

Table 4 also reports the frequencies per type of organization. Yet, here the number of observations for each category becomes too limited to indicate more than tentative directions for future research to explore. The cases of newcomers socialized at the small-scale and not-for-profit organizations in our sample (SME/PPP) who decreased their social capital mobilization, for example, all showed lower than average alter replacement ($Q = 0$). Additional studies are needed to see whether alter recurrence indeed does not help newcomers to mobilize more resources over time, even in organizations that could be expected to be more prone towards relationship building, given their smaller overall size and/or organizational cultures.

5. Discussion

With the aim to increase our understanding of how personal network development and social capital mobilization affect each other, we followed new organizational members as they went through socialization at their first employments. Changes in the composition and size of these newcomers' emerging intra-organizational networks were shown to matter with regard to the resources derived from them over time. Our findings add evidence to the notions that network churn can be beneficial for focal actors (Levin and Walter, 2018) and that the sources of social capital are "context-dependent relations that actors form in response to the changing environments associated with the natural transitions over the life course" (Small et al., 2015, p. 101). This allows us to distill our contributions and point out directions for future research.

5.1. Contributions

The findings discussed above enrich our understanding of how personal networks and social capital develop for newcomers as focal actors. At least when it comes to resources derived through intra-organizational networks, initial ties do not have to be maintained in order to mobilize more resources over time. Neither does the mobilization of social capital follow the 'more means more'-logic when newcomers increase the size of their networks at the organization. Instead, for the newcomers studied here, the odds to increase their social capital improved when they replaced ties to network alters over the course of their extended socialization. Somewhat unexpectedly, this applied not only to the strategic resources relating to career promotion, but even particularly so to the affective resources relating to socio-emotional integration, which are usually considered to thrive with growing tie strength and history. As such, we can add support to the notion that the arguments of socio-emotional selectivity theory apply beyond the context of aging focal actors (Wrzus et al., 2013). Our findings indicate that social capital mobilization also increases for newcomers as they 'mature' as focal actors and exert more agency in (un)selecting ties (Lane and Sweeny, 2019), likely focusing their network development on the ones that they perceived as more affectively rewarding (Levin and Walter, 2018).

Our study contributes to the literatures on organizational socialization and human resource development, pointing out that a newcomer's initial network ties may not necessarily be the most helpful for them in the long run. While there certainly is a social capital value to the ties that newcomers form early upon organizational entry, they might well "cut both ways, enabling as well as constraining particular outcomes" (Rumbaut, 1997, p. 8). Since these ties tend to be based on formal organizational structures and found in the newcomer's initial proximity upon starting out, they can represent a variation of kith and kin-ties that exert a 'gravitational pull' (Rumbaut, 1997) and as such may not only enable, but also hinder integration (Borgatti and Foster, 2003; Fischer and Offer, 2020), if they impede the development of ties to different or additional alters in the long run (Lane and Sweeny, 2019; Levin and Walter, 2018).

It was the female newcomers in our sample who seemed to profit from not sticking to their initial ties, in particular. This suggests that if a tendency towards 'kinkeeping' were to depend on gender (Moore, 1990), this could be a contributing factor to the proverbial glass ceilings for women in organizations (Ibarra, 1993). Our study invites further research to explore whether initial newcomer-insider ties indeed represent a variant of those ties that "bind – and band, and bond, and bundle" (Rumbaut, 1997, p. 8) and as such offer both a source of support and a constrain for focal actors (Gargiulo and Benassi, 2000; Leach and Braithwaite, 1996).

5.2. Implications

As for now, we can formulate the following recommendations for organizational socialization measures based on our findings. Often, HR tools and strategies are designed to provide opportunities to foster tie maintenance (Walsh et al., 2018). Yet, given the insights from our data, we can emphasize that alter replacement is not only a prevalent dynamic in the personal network development of newcomers, but that it can indeed foster their social capital development (Levin and Walter, 2018). Newcomers did not rely solely on ties that had grown strong over time, but could also mobilize weaker and more recent ties (Small, 2017). At least in our sample, focal actors clearly did not need to strive for mere network size in order to increase their social capital either. An ever bigger personal network did not provide them with more instrumental resources and even less affectively rewarding resources over time, while findings regarding career-strategic resources appeared more dependent on contextual factors.

Supervisors and mentors can thus encourage newcomers to embrace the dynamics of personal network development during their

socialization, not only, but particularly for those who may be ‘tied down’ by initial contacts along formal structures (regardless of their gender). This indicates a central benefit of socialization trajectories that have newcomers move through different teams or departments, as it is common for traineeships, since this provides newcomers with opportunities to develop their intra-organizational networks in terms of alter replacement.

Meanwhile, being deliberately selective about ties can also lead to a form of ‘alter turnover’ not necessarily intended by ego or the organization. That is, if newcomers are (perceived to be) overly opportunistic or selfish about relationships, alters themselves may choose to disinvest in a tie – ‘unselecting’ the newcomer, so to speak. Thus, encouraging newcomers to develop their personal networks in terms of alter replacement entails the challenge of also making it worthwhile for insiders to support them as an initial socialization network. Organizations will have to explore ways to find the right balance between showing appreciation for the support provided by initial ties, acknowledging their importance for socialization, and also practicing rituals to facilitate ‘moving on’ as an important part of the newcomer experience.

5.3. Limitations

Any conclusions drawn from our findings must be critically appraised with regards to the boundary conditions and limitations of our study. First, an underlying assumption of our research design is that increasing the mobilization of resources over time is in fact a desirable outcome for newcomers. Given the objectives of organizational socialization and what researchers know about the value of social capital at the workplace, this perspective may appear a given. Yet, individual convictions and organizational cultures may instead prefer focal actors to rely on their own resources, for example. Our focus here further lies on resources that are of instrumental, strategic, or affective value for newcomers. Yet, personal networks are equally capable of channeling exchanges that are useless or even harmful, to the point of “active obstruction” (Hollstein and Wagemann, 2014, p. 250). Our focus on building up social capital and neglecting its flipside arguably represents one valid approach in the context of socialization. Explicating our assumptions may invite future research to question these concessions, though, and focus (also) on the dark side of social capital in their designs.

Second, the changes in personal network size and composition as they were observed here certainly cannot be assumed to derive solely from (conscious) focal actor decisions, but also result from those of alters and other actors, overall network and individual tie characteristics, as well as developments at the organization and beyond its boundaries (Feld, 1981; Small et al., 2015). Certain ties will be imposed by organizational processes and structures, so that alter replacement is not a

feasible option (Fischer and Offer, 2020; Levin et al., 2016; Small, 2017). Meanwhile, change could also be overreported in our data due to the longitudinal design of the study and various ‘noise’-factors known to impact the recall based on name generators (Brashears and Quintane, 2015; Fischer and Offer, 2020; Wrzus et al., 2013). For instance, newcomers may have remembered the cognitive strain from previous rounds of the interviews and chosen to report fewer ties over time to reduce respondent burden – although there was no indication of this during the data collection or in the numbers of reported alters.

Despite the significance found for effects and the various forms of analysis conducted to corroborate our results, they must be considered indications rather than confirmation, due to the size and idiosyncrasies of the investigated sample. We have seen that our findings are likely biased towards the female newcomers in our panel, while male focal actors were slightly underrepresented and egos of non-binary gender were not identified. In larger samples, controlling for a more differentiated approach to gender identity will help to increase our understanding of differences and their impact. We also studied young professionals, here, who were not only new to their respective companies, but to their jobs and organizational cooperation overall. Newcomers at later career stages may well differ in the form of personal network development that increases their social capital (Walsh et al., 2018).

Most importantly, our findings invite a further qualitative inquiry. While we can detect a pattern, here, it takes an inductive approach to comprehend individual perceptions of what drives the development of personal networks and social capital. A respective study can reconstruct the sensemaking strategies of focal actors from interview data, triangulating insights derived from data reduction such as they were discussed here with those provided by “thick” descriptions (Geertz, 1973; Hollstein and Wagemann, 2014) of what it means for newcomers to let ties go or let them grow. Our study offers the framework and a sampling strategy to follow up with a mixed-methods design and points to a research question to guide it: We found that alter replacement fosters social capital mobilization on the (ego-)network level and especially so for affective resources, yet further research is to show how this can be explained by dynamics on the tie level. Does social capital increase through the new and different ties added or because those ties that *do* remain in the network develop into broadband channels for resource mobilization? After all, letting some ties go and letting other ties grow need not be a contradiction.

Funding

The panel study on which this paper draws was partly funded by the German Academic Exchange Service (DAAD).

Appendix A. List of prompts used as name generators in the formalized network inventory

Name generators

- Please name any employees at the organization who are officially responsible for you as supervisors or advisors.
- Are there any other employees who are not officially assigned to you as supervisor or advisor, but have fulfilled this role for you informally?
- ¹Are there any employees you’ve met during earlier assignments with whom you are still in contact now?
- Whom would ask for a recommendation or to put in ‘a good word’ for you, if you were to apply for a new position?
- Please name the employees with whom you have recently collaborated directly, for instance as colleagues within your immediate team or department.
- Are there any employees from other teams or departments that you could easily contact, for instance if you needed specific information or input?
- Whom would you turn to if you had to quickly solve a technical problem on the job?
- Whom would you turn to if you were looking for personal advice or wanted to talk about potential problems on the job?
- With whom do you prefer to spend your lunch or coffee breaks?
- Who is the person (or are the persons) with the highest position in the organizational hierarchy with whom you have had contact so far?

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- Are there any colleagues from other offices in Germany with whom you have had more regular contact?
- ¹Are there any colleagues from other offices in other countries with whom you have had more regular contact?
- Please name any other students, interns, trainees, or apprentices at the organization with whom you have been in contact.
- Are there any employees to whom your contact is still very fresh or fleeting, but might become interesting in the future?
- Are there any employees who often turn to you for support?
- Please look over the names you have listed and see if there is anyone missing. Is there anyone else who you think should be included on the list?

Note: ¹Prompts that were added from T2 onwards.

Appendix B. List of prompts to measure mobilized network resources

Resource generators

- This person has taught me a lot about their knowledge or skills on the job.
- This person has provided me with opportunities to grow and/or gather experience.
- This person has taken me along to meetings with colleagues, customers, or partners.
- This person has given me feedback on my performance (strengths or weaknesses).
- This person has provided me with important background information to understand why things are done a certain way at our organization.
- This person is a role model for me when it comes to representing our organization towards (external) others.
- This person has helped me with my tasks when things got hectic or difficult.
- This person has introduced me to his/her contacts at the organization.
- This person has given me tips or advice for my career.
- This person is a role model for me when it comes to working together with colleagues.
- This person is a career role model for me.
- This person has made sure that my performance becomes visible inside or beyond my team and that I get credit for it.
- This person has taken decisions or has taken influence on decisions which concern my career at the organization.
- This person has made me feel accepted and appreciated.
- This is a person I could turn to when I needed to vent frustration.
- With this person, I've also talked about personal matters or interests (such as my family or hobbies).
- This is a person I also consider a personal friend (that is, we have a friendship connecting us beyond work).
- This person has been a source of energy or motivation for me at work.
- This is a person with whom I have had fun at work.

Appendix C. Probing for effects of control variables

Variables included	Model						<i>R</i> ² Nagel kerke
	<i>Step 1</i>			<i>Step 2</i>			
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	
Mobilized social capital (overall)							
Gender of newcomer	−0.22	0.88	.803	−0.17	1.03	.868	0.39
Organization type SME/PPP	−1.24	1.14	.279	−1.80	1.38	.194	
Organization type MNE	−0.94	1.06	.372	−2.28	1.45	.166	
H1(a): Alter replacement				0.20	0.10	.022*	
Gender of newcomer				−0.43	0.93	.645	0.17
Organization type SME/PPP				−1.25	1.20	.297	
Organization type MNE				−0.38	1.16	.741	
H2(a): Network growth				−0.04	0.03	.094	
Mobilized task-performance support							
Gender of newcomer	−1.02	0.93	.275	−1.01	0.94	.285	0.19
Organization type SME/PPP	−0.80	1.17	.495	−0.85	1.19	.473	
Organization type MNE	−1.50	1.10	.172	−1.76	1.16	.130	
H1(b): Alter replacement				0.05	0.06	.208	
Gender of newcomer				−1.13	0.97	.244	0.17
Organization type SME/PPP				−0.77	1.19	.516	
Organization type MNE				−1.27	1.18	.279	
H2(b): Network growth				−0.02	0.03	.287	
Mobilized initial career promotion							
Gender of newcomer	−1.20	0.99	.229	−1.38	1.12	.219	0.44
Organization type SME/PPP	−1.79	1.40	.201	−2.91	1.99	.145	
Organization type MNE	0.60	1.04	.560	0.09	1.12	.932	
H1(c): Alter replacement				0.13	0.07	.034*	
Gender of newcomer				−2.41	1.45	.095	0.50
Organization type SME/PPP				−2.39	1.79	.181	
Organization type MNE				2.51	1.79	.155	
H2(c): Network growth				−0.09	0.05	.026*	

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Variables included	Model						R^2 Nagel kerke
	<i>Step 1</i>			<i>Step 2</i>			
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	
Mobilized socio-emotional integration							
Gender of newcomer	−0.20	1.07	.853	−0.39	1.48	.789	0.47
Organization type SME/PPP	−0.03	1.19	.981	−0.49	1.62	.759	
Organization type MNE	−1.31	1.13	.335	−2.59	1.79	.147	
H1(d): Alter replacement				0.23	0.12	.027*	
Gender of newcomer				−0.23	1.21	.847	0.29
Organization type SME/PPP				0.33	1.35	.808	
Organization type MNE				−0.30	1.56	.849	
H2(d): Network growth				−0.08	0.05	.043*	

Note: In the assessments of the dependent variables, step 1 testing the effect of the controls is similar and therefore has not been reported twice. SE = standard error. * $p < .05$.

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